

## 10. METERING.

### 10.1 Applicability.

Unless otherwise expressly stated to the contrary, the requirements set forth in these Sections 10.1 to 10.5 inclusive apply only to ISO Metered Entities ~~and Participating TOs owning meters located at ISO Controlled Grid interconnections ("Tie Point Meters").~~

### 10.2 Responsibilities of ISO Metered Entities

#### 10.2.1 Duty to Provide Meter Data.

ISO Metered Entities shall ensure that Meter Data from their meters ~~located~~ and directly connected to the ISO Controlled Grid or at interconnections thereto, is made available to the ISO revenue ~~meter~~ metering data acquisition and processing system in accordance with the requirements of these Sections 10.1 to 10.5 and the ISO metering protocols. Pursuant to this obligation, the ISO shall establish revenue metering ~~and related communication~~ protocols for such ISO Metered Entities.

#### 10.2.2 Duty to Install and Maintain Meters.

The ISO may require ISO Metered Entities to install, at their cost, additional meters and relevant metering system components, including real time metering, at ISO specified Meter Points or other locations as deemed necessary by the ISO, in addition to those connected to or existing on the ISO Controlled Grid at the ISO

Operations Date, including requiring the metering of transmission interfaces connecting Zones. ISO Metered Entities, at their cost, shall install and maintain, or cause to be installed and maintained, metering equipment and associated communication devices at ISO designated Meter metering Points to meet the requirements of this Section 10 and the ISO metering protocols. Nothing in this Section 10 shall preclude ISO Metered Entities from installing additional meters, instrument transformers and associated communications facilities at their own cost.

### **10.2.3 Metering Standards.**

Each ISO Metered Entity shall ensure that each of its meters ~~is capable of providing Settlement Quality Meter Data that~~ used to provide Meter Data to the ISO complies with the meter standards and accuracy requirements for meters set forth in Appendix J, ~~Part A in respect to End Users and Appendix J, Part B in respect to Participating Sellers~~ and the ISO metering protocols.

### **10.2.4 Certification of Meters.**

Each ISO Metered Entity that makes Meter Data available to the ISO ~~revenue~~ Meter Data shall ensure that metering facilities used to produce such Meter Data have been certified by the ISO as meeting the requirements of these Sections 10.1 to 10.5 and the ISO metering protocols. Certification of the relevant metering facilities shall only be provided upon the production of such evidence as the ISO may reasonably require to demonstrate that the facilities in question have been

documented, inspected and successfully tested by the ISO or an ~~authorized ISO Approved Meter~~ ISO Authorized Inspector for conformance to the standards and accuracy requirements ~~set out~~ referred to in Appendix J and the ISO metering protocols. Meters of End-Use ISO Metered Entities in place as of the ISO Operations Date are deemed to be certified as in compliance with Appendix J and such End-Users shall not be required to enter into meter service agreements with the ISO provided that their Scheduling Coordinators have entered into a meter service agreement with the ISO. ISO certification pursuant to this Section 10.2.4 shall not relieve the ISO Metered Entity from the obligation to ensure that its metering facilities continue to remain in compliance with the requirements of these Sections 10.1 to 10.5 and the ISO metering protocols.

#### **10.2.5 Metering Communications.**

The ISO's revenue meter data acquisition and processing system shall collect and process Meter Data made available by ISO Metered Entities pursuant to meter service agreements. Meter Data for ISO Metered Entities shall be made available to the ISO's revenue meter data acquisition and processing system either directly by the ISO Metered Entity or via a central data server which collects Meter Data for various ISO Metered Entities provided that the central data server does not aggregate or adjust that Meter Data. Meter Data on the ISO's revenue meter data acquisition and processing system may be accessed from the system's database by the ISO Settlement system, other ISO application programs, relevant

Scheduling Coordinators and other authorized users as identified in the relevant meter service agreement (“other authorized users”) subject to the ISO being satisfied that access by such authorized users will not adversely effect the security of data held by the ISO. ISO Metered Entities shall ensure that their metering facilities are compatible with the ISO revenue meter data acquisition and processing system for these purposes. The ISO may, at its discretion, exempt an ISO Metered Entity from the requirement to make Meter Data directly available to the ISO’s revenue meter data acquisition and processing system, for example, ~~in the case of small remote Generators~~ where the installation of communication links is unnecessary, impracticable or uneconomic. The ISO shall maintain the revenue metering data acquisition and processing system and remedy any faults occurring in such system. ISO Metered Entities shall ensure compliance with the metering ~~and related communication~~ protocols to be established by the ISO pursuant to Section 10.2.1. Scheduling Coordinators and other authorized users requiring Settlement Quality Meter Data for ISO Metered Entities they schedule or supply shall, ~~with prior consent of the relevant ISO Metered Entity,~~ may obtain such data by polling the revenue meter data acquisition and processing system via WEnet in accordance with ~~protocols set out in relevant meter service agreements.~~ the ISO metering protocol. Scheduling Coordinators and other authorized users shall not poll the ISO revenue meter data acquisition and processing system for any other purpose, unless specifically authorized in their meter service agreement. If any

Scheduling Coordinator ~~or other authorized user~~ does not have the ability to poll the ISO's revenue metering data acquisition and processing system as at the ISO Operations Date, that Scheduling Coordinator ~~or other authorized user~~ shall have a period of up to 12 months from the ISO Operations Date in which to install the necessary equipment to enable it to poll directly the ISO revenue metering data acquisition and processing system. During the period in which a Scheduling Coordinator ~~or other authorized user~~ is unable to poll directly the ISO revenue meter data acquisition and processing system, that Scheduling Coordinator ~~or other authorized user~~ will be responsible for providing the ISO with Settlement Read Quality Meter Data in accordance with the ~~protocols set out in their relevant meter service agreement~~ ISO metering protocols.

#### **10.2.6 Access to Meter Data.**

The ISO has complete authority over all rights of access to (and has authority to deny access to) the ISO's revenue metering data acquisition and processing system including servers (where used), interface equipment, and software needed to collect the relevant information for ~~s~~ Settlement, billing and related purposes. Each Market Participant acknowledges this ISO authority as a condition of ISO Controlled Grid service and participation. For ISO Metered Entities, authority over the sealing of meters, and all related metering ~~system components~~ facilities, shall reside solely with the ISO for all ISO designated Meter Points, regardless of any remote electronic access that an ISO Metered Entity or its Scheduling Coordinator

may have provided to third parties ~~or other authorized users~~, except as otherwise may be required by law, FERC, any Local Regulatory Authority or other provision of this ISO Tariff. Meter Data supplied by an ISO Metered Entity shall be made available by the ISO to the Scheduling Coordinator representing such ISO Metered Entity and the other authorized users identified in its Meter Service agreement, but shall not be disclosed to any other third party except as may otherwise be required by law, FERC, any Local Regulatory Authority or other provision of this ISO Tariff. Access by third parties other than authorized users to Meter Data held by the ISO shall be coordinated through the Scheduling Coordinator representing the relevant ISO Metered Entity that supplied the data and shall not be obtained directly from the ISO on any basis including, without limitation, by the polling of the ISO's revenue meter data acquisition and processing system via WEnet.

### **10.3 Meter Service Agreements.**

#### **10.3.1 Requirement for Meter Service Agreements.**

The ISO shall establish meter service agreements with ISO Metered Entities for the collection of Meter Data. Such agreements shall specify that ISO Metered Entities shall make available to the ISO's revenue meter data acquisition and processing system, Meter Data meeting the requirements of these Sections 10.1 to 10.5 inclusive and the ISO metering protocols. The meter service agreement and the ISO metering protocols shall specify the format of Meter Data to be submitted, which shall be identified by TO, Distribution System, Zone, ISO Controlled Grid

interface point and other information reasonably required by the ISO. Meter service agreements will identify other authorized users which are allowed to access the ~~metering data~~ Settlement Quality Meter Data held by the ISO. The ISO will ensure that the relevant UDCs and TOs are included as other authorized users.

### **10.3.2 Security and Meter Data Validation Procedures.**

The meter service agreement for each ISO Metered Entity and the ISO metering protocols shall set out, in such detail as the ISO may deem necessary, the Meter Data security and validation procedures that the ISO shall apply to the Meter Data made available by each ISO Metered Entity. The ISO may base the security and validation procedures on historical data or an appropriate alternative data source. The ISO shall correct or replace or cause to be corrected or replaced inaccurate or missing data. The procedure may include data correction and substitution algorithms which shall estimate, substitute and flag such inaccurate or missing data. Any necessary correction or replacement shall be approved by the ISO prior to the data being sent to the ISO Settlement system. Security and validation measures for existing Tie-Point Meters shall be consistent with existing arrangements with the operators in adjacent Control Areas. Any additional measures or changes to the existing arrangements shall only be implemented upon mutual agreement of the ISO and the operator in the adjacent Control Area.

**10.3.3 Availability of Meter Data.**

The meter service agreement and the ISO metering protocols shall set out the ISO's requirements with regard to the frequency which it requires Meter Data to be made available to the ISO ~~metering~~ revenue meter data acquisition and processing system.

**10.3.4 Failure to Achieve Required Standards.**

Meter service agreements shall set out appropriate measures and rights the ISO may exercise upon any failure by the other party to meet the requirements for meter standards and accuracy set out in these Sections 10.1 to 10.5 inclusive.

**10.3.5 ISO Imposed Penalties and Sanctions**

The ISO shall have the authority to impose penalties and sanctions, including but not limited to suspension of trading rights, if an ISO Metered Entity provides fraudulent metering data to the ISO, ~~or provides fraudulent metering data to a Scheduling Coordinator or other party which relies on the fraudulent data to submit metering data to the ISO.~~ Such penalties shall be approved by FERC.

**10.4 Low Side Metering.**

Generators may, with the prior written approval of the ISO, install meters at the low voltage side of the connecting transformer. Such approval shall be given only if the ISO is satisfied that adequate accuracy and security of Meter Data obtained can be assured. Meter service agreements related to Generators utilizing low voltage side metering shall set out ISO approved transformer loss correction

factors to be applied by the Generator. The ISO has the sole authority to require and approve any and all other relevant metering system correction factors associated with an ISO Metered Entity.

## **10.5 Audit, Testing Inspection and Certification Requirements.**

### **10.5.1 ISO Metered Entity Certification Testing and Audits.**

ISO Metered Entities are subject to ISO audit, testing and certification requirements for their entire metering system(s), including all relevant communication facilities and instrument transformers.

### **10.5.2 Exemptions from ~~Certification and Audit Requirements~~ ISO Metering Standards**

The ISO has the authority to grant exemptions from certain ISO metering standards for an ISO Metered Entity provided the ISO annually publishes such information. An ISO Metered Entity ~~or a Scheduling Coordinator Metered Entity~~ with an interim exemption shall provide site specific Settlement Quality Meter Data to the ISO in accordance with its meter service agreement and the ISO metering protocols. A Generator connected directly to a UDC ~~d~~Distribution sSystem and that sell its entire output to the UDC in which the Generator is located is not subject to the audit, testing or certification requirements of the ISO.

## **10.6 Metering for Scheduling Coordinator Metered Entities.**

**10.6.1 Applicability.**

The requirements set forth in this Section 10.6 shall apply only to Scheduling Coordinators representing Scheduling Coordinator Metered Entities.

**10.6.2 Responsibilities of Scheduling Coordinators and the ISO.**

**10.6.2.1 Duty to Provide Meter Data.** Scheduling Coordinators shall provide the ISO with Settlement Quality Meter Data for all of the Scheduling Coordinator Metered Entities served by the Scheduling Coordinator no later than the day specified in Section 10.6.3. Settlement Quality Meter Data for Scheduling Coordinator Metered Entities shall be either (1) an accurate measure of the actual consumption of Energy by each Scheduling Coordinator Metered Entity in each Settlement Period, or (2) for Scheduling Coordinator Metered Entities connected to a UDC Distribution System and meeting that Distribution System's requirement for load profiling eligibility, a profile of that consumption derived directly from an accurate cumulative measure of the actual consumption of Energy over a known period of time and an allocation of that consumption to Settlement Periods using the applicable Approved Load Profile.

**10.6.2.2 Loss Factors.** Where a Scheduling Coordinator Metered Entity is connected to a UDC's Distribution System, the responsible Scheduling Coordinator shall adjust the Meter Data by an estimated Distribution System loss factor to derive an equivalent ISO Controlled Grid level measure. Such estimated Distribution System loss factors shall be approved by the relevant Local Regulatory

Authority prior to their use. The Scheduling Coordinator shall aggregate its equivalent ISO Controlled Grid-level Meter Data for Scheduling Coordinator Metered Entities in accordance with the ISO metering Pprotocols and submit this data to the ISO ~~using the ISO metering communications protocols set forth in Section 10.2.5.~~ in accordance with the ISO metering protocols.

**10.6.2.3 ~~Profiled Meter Data.~~** ~~Where a Scheduling Coordinator submits to the ISO profiled Meter Data for Scheduling Coordinator Metered Entities, the Scheduling Coordinator shall also submit the cumulative Meter Data upon which the profile was based, the applicable Approved Load Profile and the dates and hours covered by the data. The ISO shall verify that the sum of the profiled hourly Meter Data equals the corresponding cumulative Meter Data and, in the event that it is not so equal, without prejudice to any rights it may exercise as referred to in Section 10.6.7.8, the ISO may require the relevant Scheduling Coordinator to resubmit corrected Meter Data.~~ Scheduling Coordinators shall be responsible for obtaining all necessary authorizations from Local Regulatory Authorities having jurisdiction over the use of profiled Meter Data in any Settlement process in which load profiles are used to allocate consumption to Settlement Periods.

**10.6.2.4 Communication of Meter Data.** Each Scheduling Coordinator shall submit Settlement Quality Meter Data for Scheduling Coordinator Metered Entities to the ISO in accordance with the ISO metering Pprotocols.

**10.6.3 Timing of Meter Data Submission.**

Scheduling Coordinators shall submit either hourly time-stamped Settlement Quality Meter Data for Scheduling Coordinator Metered Entities or profiled ~~cumulative~~~~ing End Use~~ Settlement Quality Meter Data to the ISO for each Settlement Period in a Trading Day within forty one (41) days of that Trading Day.

**10.6.4 Meter Standards.**

Each Scheduling Coordinator, in conjunction with the relevant Local Regulatory Authority, shall ensure that each of its Scheduling Coordinator Metered Entities connected to and served from the Distribution System of a UDC shall be metered by a revenue meter complying with any standards of the relevant Local Regulatory Authority or, if no such standards have been set by that Local Regulatory Authority, the metering standards set forth in Appendix J and the ISO metering protocols. ~~Hourly Meter Data for Scheduling Coordinator Metered Entities submitted to the ISO by Scheduling Coordinators shall carry a flag indicating whether the data represents an hourly time-stamped value or profiled value and, in the case of profiled values, a reference to the Approved Load Profile used to allocate that cumulative consumption of Energy to Settlement Periods.~~

**10.6.5 Access to Meter Data.**

The ISO has complete authority over rights of access to (and has authority to deny access to) its revenue meter data acquisition and processing system including servers (where used), interface equipment, and software needed to accept ~~End~~

~~Use~~Settlement Quality Meter Data from Scheduling Coordinator Metered Entities for Settlement, billing and related purposes. Each Scheduling Coordinator, on behalf of itself and Market Participants that it serves or represents, acknowledges this ISO authority as a condition of access to the ISO Controlled Grid.

#### **10.6.6 ~~Validation~~Collection of Meter Data.**

**10.6.6.1 Responsibility of Scheduling Coordinators.** Each Scheduling Coordinator shall be responsible for the collection of Meter Data from the Scheduling Coordinator Metered Entities it represents and for ensuring that the Settlement Quality Meter Data supplied to the ISO meets the requirements of this Section 10.6 and the ISO metering protocols.

**10.6.6.2 Certification of Meters.** Scheduling Coordinators shall ~~approve and certify~~ensure that revenue meters and related metering facilities of those Scheduling Coordinator Metered Entities whom they represent are certified in accordance with any certification criteria prescribed by the relevant Local Regulatory Authority or, if no such criteria have been prescribed by that Local Regulatory Authority, certified in accordance with the ISO metering protocols. ~~and Scheduling Coordinators~~ shall upon request of the ISO supply promptly copies of all certificates issued by the relevant Regulatory Authority. Meters of End Use Scheduling Coordinator Metered Entities in place as of the ISO Operations Date are deemed to be certified as in compliance with Appendix J. Once certified, ~~M~~meters for Scheduling Coordinator Metered Entities need not be recertified provided such

~~End Use M~~eters are maintained so as to meet the standards and accuracy ~~required~~ requirements prescribed under Appendix J by any relevant Local Regulatory Authority or, if no such standards have been prescribed by that Local Regulatory Authority, such requirements as referred to in Appendix J and the ISO metering protocols. Recertification is not required by the ISO upon an election by a Scheduling Coordinator Metered Entity to change its Scheduling Coordinator from which it takes service. ~~Certificates issued by a Scheduling Coordinator provided to the ISO shall include the Scheduling Coordinator's representation that the meter model in question has been documented, inspected and successfully tested by a legitimate testing facility and has met the standards and accuracy requirements set forth in Appendix J.~~

#### **10.6.7 Meter Service Agreements.**

**10.6.7.1 Requirement for Meter Service Agreements.** The ISO shall enter into meter service agreements with Scheduling Coordinators responsible for providing Settlement Quality Meter Data for Scheduling Coordinator Metered Entities to the ISO. Such agreements shall specify that Scheduling Coordinators require their Scheduling Coordinator Metered Entities to adhere to the ~~same~~ meter requirements ~~to those~~ set forth in this Section 10.6.

**10.6.7.2 [Not Used] Security and Meter Validation Procedures.** ~~The meter service agreement for each Scheduling Coordinator shall set out the security and Meter Data validation procedures that the Scheduling Coordinator shall have applied to~~

~~the hourly and cumulating Meter Data of the Scheduling Coordinator Metered Entities it serves or represents in order to comply with this Section 10.6.~~

**10.6.7.3 [Not Used] Validation Procedures.** ~~The ISO may adopt a set of standards for Meter Data security and validation, editing and estimating that shall be included in each meter service agreement at the ISO's discretion. Validated meter data shall conform to these standards unless the ISO has, at its discretion, exempted the relevant Scheduling Coordinator from any of the required standards following an application from a Scheduling Coordinator, or otherwise determines that a different set of procedures should apply.~~

**10.6.7.4 Approval by Local Regulatory Authority of Security and Validation Procedures.** ~~Scheduling Coordinators shall obtain the~~ be responsible for obtaining any necessary approval of the relevant Local Regulatory Authority to its proposed revisions to the ISO's set of standards referred to in Section 10.6.7.3 before submitting them to the ISO for approval pursuant to Section 10.6.7.3 security, validation, editing and estimation procedures.

**10.6.7.5 UDC and TO Agreements.** Each Scheduling Coordinator shall be responsible for obtaining any necessary consent from the UDCs on whose Distribution Systems or the Participating TOs on whose transmission facilities the Scheduling Coordinator has Scheduling Coordinator Metered Entities as is necessary to give effect to the procedures governing Meter Data validation, and security, and inspection and testing of metering facilities. Scheduling Coordinators

must verify with the relevant UDC the identity of each Scheduling Coordinator Metered Entity they represent and must notify the UDC of any discrepancies of which they become aware.

**10.6.7.6 ~~[Not Used] ISO May Require Amendments to Security and Validation~~**

~~**Procedures.** The ISO may require Scheduling Coordinators to amend any existing security and validation procedures for Meter Data and amend its own set of standards referred to in Section 10.6.7.3 from time to time as it deems necessary.~~

**10.6.7.7 Scheduling Coordinator Metered Entity Certification, Testing and Audit.**

Subject to any Local Regulatory Authority requirements, ~~¶~~the ISO reserves the right to inspect, test and otherwise audit the entire metering systems of the Scheduling Coordinator Metered Entity connected to the ISO Controlled Grid, from the meter data server to the metering system(s), and such systems shall be subject to ISO audits and tests. However, only the meter data server supplying the ISO is subject to ISO certification requirements.

The Scheduling Coordinator or its designated representative shall provide the ISO with all such information, assistance and cooperation the ISO reasonably requires in order to conduct such inspections, tests and audits.

**10.6.7.8 Failure to Achieve Required Standards.** Subject to any Local Regulatory

Authority requirements, ~~¶~~meter service agreements shall set out appropriate measures and rights the ISO may exercise upon any failure by the other party to

meet the requirements for meter standards and accuracy set out in this Section

10.6.

#### **10.6.8 Data Access.**

Meter Data of a Scheduling Coordinator Metered Entity remains the property of that Scheduling Coordinator Metered Entity and shall be made available to third parties only with its express permission or as otherwise required by law or provided for in this ISO Tariff. The ISO shall be granted access to Meter Data of Scheduling Coordinator Metered Entities obtained by Scheduling Coordinators.

#### **10.6.9 Exemptions from ISO Metering Standards**

The ISO has the authority to grant exemptions from certain ISO metering standards for Scheduling Coordinator Metered Entities that are subject to ISO metering standards provided the ISO annually publishes such information.

## **11. ISO SETTLEMENTS AND BILLING.**

### **11.1 Settlement Principles.**

**11.1.1** The ISO shall calculate, account for and settle transactions in accordance with the following principles:

**11.1.2** The ISO shall be responsible for calculating Settlement balances for all transactions carried out by Scheduling Coordinators on the ISO Controlled Grid in each Settlement Period;

**11.1.3** The ISO shall carry out all Settlements in accordance with Meter Data provided pursuant to the requirements of Section 10 of this ISO Tariff;

**11.1.4** The ISO shall create and maintain computer back-up systems, including off-site storage of all necessary computer hardware, software, records and data at an alternative location that, in the event of a Settlement system breakdown at the primary location of the day-to-day operations of the ISO, could serve as an alternative location for day-to-day Settlement operations within a reasonable period of time; and

**11.1.5** The ISO shall retain all Settlement data records for a period which, at least, allows for the re-run of data as required by this ISO Tariff and any adjustment rules of the Local Regulatory Authority governing the Scheduling Coordinators and their End-Use Customers;

**11.1.6** The ISO shall settle the following charges in accordance with Section 11.2 of this ISO Tariff:

- (1) Grid Management Charge;
- (2) Grid Operations Charge;
- (3) Ancillary Services charges;
- (4) Imbalance Energy charges;
- (5) Usage Charges;
- (6) Wheeling Access Charges;
- (7) Voltage Support and Black Start charges; and
- (8) Reliability Must-Run Charges

## **11.2 Calculations of Settlements.**

The ISO shall calculate, account for and settle the following charges in accordance with this ISO Tariff.

### **11.2.1 Grid Management Charge.**

The Grid Management Charge will be levied in accordance with Section 8 of this ISO Tariff.

### **11.2.2 Grid Operations Charge.**

The Grid Operations Charge will be levied in accordance with Section 7.3.2 of this ISO Tariff.

**11.2.3 Ancillary Services**

The ISO shall calculate, account for and settle charges and payments for Ancillary Services as set out in Sections 2.5.27.1 to 4, and 2.5.28.1 to 4 of this ISO Tariff.

**11.2.4 Imbalance Energy.**

The ISO shall calculate, account for and settle Imbalance Energy in the Real Time Market for each Settlement Period for the relevant Zone or Scheduling Point within the ISO Controlled Grid.

**11.2.4.1 Net Settlements for Imbalance Energy.**

Imbalance Energy attributable to each Scheduling Coordinator in each Settlement Period in the relevant Zone shall be deemed to be sold or purchased, as the case may be, by the ISO and payments for Imbalance Energy shall be settled by debiting or crediting, as the case may be, the Scheduling Coordinator with an amount for each Settlement Period equal to:

*IE Charge =*

$$\left( \sum_i GenDev_i - \sum_i LoadDev_i \right) * P + \left( \sum_q ImpDev_q \right) * P - \left( \sum_q ExpDev_q \right) * P + UFEC$$

Where:

The deviation between scheduled and actual Energy Generation for Generator i represented by the Scheduling Coordinator for the Settlement Period is calculated as follows:

$$\underline{GenDev_i = G_s * GMM_f - [(G_a - G_{adj}) * GMM_{ah} - G_{a/s}]}$$

The deviation between scheduled and actual Load consumption for Load i represented by the Scheduling Coordinator for the Settlement Period is calculated as follows:

$$\underline{LoadDev_i = L_s - [(L_a - L_{adj}) + L_{a/s}]}$$

The deviation between forward, scheduled and Real Time adjustments to Energy imports, adjusted for losses, for Scheduling Point q represented by the Scheduling Coordinator for the Settlement Period is calculated as follows:

$$\underline{ImpDev_q = I_s * GMM_{fq} - [(I_a - I_{adj}) * GMM_{ahq}] + I_{a/s}}$$

The deviation between forward, scheduled and Real Time adjustments to Energy exports for Scheduling Point q represented by the Scheduling Coordinator for the Settlement Period is calculated as follows:

$$\underline{ExpDev_q = E_s - E_a - E_{adj}}$$

and where:

**$G_s$**  = sum of effective schedules for Day-Ahead and Hour-Ahead

**$GMM_f$**  = ~~estimated GMM for Day-Ahead and Hour-Ahead~~

**$G_a$**  = actual metered ~~GMM~~ Generation

**$G_{adj}$**  = deviations in real time ordered by the ISO for purposes such as

eCongestion mManagement

**$GMM_{ah}$**  = ~~ex post hour-ahead~~ GMM (proxy for ex-post GMM)

$G_{a/s}$  = Energy generated from Ancillary Service resource or Supplemental Energy resource due to ISO dispatch instruction

$L_s$  = sum of ~~effective~~ Demand scheduled for Day-Ahead and Hour-Ahead

$L_a$  = actual metered Demand

$L_{adj}$  = Demand deviation in real time ordered by ISO for purposes such as ~~€~~Congestion ~~Management~~

$L_{a/s}$  = Demand ~~R~~reduction from Ancillary Service resource due to ISO dispatch instruction

$GMM_{fq}$  = estimated GMM for an Energy import at Scheduling Point q for Day-Ahead

$GMM_{ahq}$  = estimated GMM for an Energy import at Scheduling Point q for Hour-Ahead (proxy for ex-post GMM)

$I_s$  = sum of Scheduled Energy import through Scheduling Point q for Day-Ahead and Hour-Ahead

$I_a$  = sum of actual Energy import through Scheduling Point q.

$I_{adj}$  = deviation in real time import ordered by ISO for purposes such as Congestion Management, and import curtailment.

$I_{a/s}$  = Energy generated from Ancillary Service System Resources pursuant to Existing Contracts or Supplemental Energy from interties due to dispatch instruction

$E_s$  = sum of scheduled Energy export scheduled through Scheduled Point q for Day-Ahead and Hour-Ahead

$E_a$  = sum of actual Energy export through Scheduling Point q

$E_{adj}$  = deviation in real time export ordered by ISO for purposes such as Congestion Management, and export curtailment

$P$  = Hourly Ex Post Price for Imbalance Energy for the relevant hour

~~$b$~~  = ~~the number of UDC Service Areas~~

~~$E_{UFEk}$~~  = ~~the proportion of the UFE allocated to the Scheduling Coordinator that has End User Demand in UDC Service Area  $k$  (calculated in accordance with Sections 11.2.4.3-11.2.4.6~~

$UFEC$  = the Unaccounted for Energy Charge for the Scheduling Coordinator calculated as follows:

### **Unaccounted for Energy Charge**

The hourly Unaccounted for Energy Charge on Scheduling Coordinator  $j$  for Settlement Period  $t$  for each relevant Zone is calculated in the following manner:

The UFE for each utility service territory  $k$  is calculated as follows,

$$\underline{E_{UFE\_UDC\_k} = (I_k - E_k + G_k - (RTM_k + LPM_k) - TL_k)}$$

The Transmission Loss calculation per Settlement Period  $t$  per relevant Zone for each utility service territory  $k$  is calculated as follows,

$$\underline{TL_k = \sum [G_a * (1 - GMM_{ah})] + \sum [I_a (1 - GMM_{ahq})]}$$

Each metered demand point, either ISO grid connected or connected through a UDC, is allocated a portion of the UFE as follows:

$$E_{UFE\_z} = \frac{D_z}{\sum_z D_z} E_{UFE\_UDC\_k}$$

The UFE charge for Scheduling Coordinator j per Settlement Period per relevant Zone is then,

$$UFEC_j = \left( \sum_z E_{UFE\_z} \right) * P_{xt}$$

Where the terms used in the equations have the following meaning:

**$E_{UFE\_UDC\_k}$  -- MWh**

The Unaccounted for Energy (UFE) for utility service territory k.

**$E_{UFE\_z}$  -- MWh**

The portion of Unaccounted for Energy (UFE) allocated to metering point z.

**$I_k$  -- MWh**

The total metered imports into utility service territory k in Settlement Period t.

**$E_k$  -- MWh**

The total metered exports from utility service territory k in Settlement Period t.

**$G_k$  -- MWh**

The total metered Generation in Settlement Period t in utility service territory k.

**RTM<sub>k</sub> -- MWh**

The Settlement Period t total of the real-time metering in utility service territory k in Settlement Period t.

**LPM<sub>k</sub> -- MWh**

The calculated total of the Load Profile metering in utility service territory k per Settlement Period t.

**TL<sub>k</sub> -- MWh**

The Transmission Losses per Settlement Period t in utility service territory k.

**D<sub>z</sub> -- MWh**

The Demand including Exports in Settlement Period t at metered point z.

**Replacement Reserve Dispatch Charge**

For each Scheduling Coordinators whose Generators falls below ~~their~~its Schedules, or whose Demand exceeds ~~their~~its Schedules, such that the net Schedule is unbalanced, the following additional charge will apply:

$$RepResDispChrg_{jt} = D_{jt} * RRDispCost_i$$

where:

$$D_{jt} = \frac{\text{Max} \left( 0, \left\{ \sum_i GenDev_i - \sum_i LoadDev_i + \sum_q ImpDev_q + \sum_q ExpDev_q + E_{UFE\_jk} \right\} \right)}{\sum \text{Max} \left( 0, \left\{ \sum_i GenDev_i - \sum_i LoadDev_i + \sum_q ImpDev_q + \sum_q ExpDev_q + E_{UFE\_jk} \right\} \right)}$$

where:

*RRDispCost* is defined in Section 2.5.28.4 of this ISO Tariff.

If there is Congestion in the Day-Ahead Market the ISO will allocate the Replacement Reserve Dispatch Charges on a Zonal basis. If there is no Congestion in the Day-Ahead Market the ISO will allocate the Replacement Reserve Dispatch Charges on a ISO Control Area-wide basis (irrespective of whether there is Congestion in the Hour-Ahead Markets or not).

This additional charge (*RepResDispChrg*) allocates the cost of dispatched Replacement Reserve to Scheduling Coordinators in proportion to their contribution to the need for the dispatch of that Replacement Reserve, as measured by the magnitude of the Energy insufficiency served through the Imbalance Energy market. The ISO shall develop protocols and procedures for the monitoring of persistent intentional excessive imbalances by Scheduling Coordinators and for the imposition of appropriate sanctions and/or penalties to deter such behavior. The net balance of the charges attributable to all Scheduling Coordinators represents the Transmission Losses imbalance total for each hourly Settlement Period.

**11.2.4.2** With respect to Regulatory Must-Take and Regulatory Must-Run Generation, and with respect to Generating Units, Loads and imports which have not bid into the Imbalance Energy markets but which have been dispatched by the ISO to avoid an intervention in market operations or to prevent a System Emergency, the ISO shall calculate, account for and settle deviations from the Final Schedule submitted on behalf of each such Generating Unit, Load or import with the relevant Scheduling Coordinator for each Settlement Period for each such

Generating Unit, Load or import by way of the Uninstructed Imbalance Energy Charge price as calculated in accordance with Section 11.2.4.1.

#### **11.2.4.3 Unaccounted For Energy (UFE)**

UFE is treated as Imbalance Energy. For each Settlement Period, the ISO will calculate UFE on the ISO Controlled Grid, for each UDC Service Area. The UFE will be included in the net settlements for Imbalance Energy in Section 11.2.4.1.

UFE attributable to meter measurement errors, load profile errors, Energy theft, and distribution loss deviations will be allocated to each Scheduling Coordinator based on the ratio of their metered Demand (including exports to neighboring

Control Areas) within the relevant UDC Service Area to total metered Demand

within the UDC Service Area. ~~To the extent practical, UFE associated with Load profiling error will be allocated to Scheduling Coordinators based on the ratio of~~

~~their non hourly metered Demand within the relevant UDC Service Area to the~~

~~total non hourly metered Demand within the UDC Service Area and shall be~~

~~determined in accordance with the collection and verification procedures in Section~~

~~10. Total metered Demand includes both hourly metered Demand and non hourly~~

~~metered Demand that is converted to an hourly Demand using Local Regulatory~~

~~Authority approved statistical Load profiles. The ISO shall separately calculate and~~

~~allocate UFE attributable to Load profiling error on a best estimate basis using a~~

~~methodology approved by the ISO Governing Board.~~

**11.2.4.4** [Not Used] Sections 11.2.4.5 and 11.2.4.6 shall not apply until such date as the ISO has installed the necessary software (of which 30 days prior notice shall be published on WEnet). Until that date, the ISO shall allocate UFE in each UDC Service Area to Scheduling Coordinators based on each Scheduling Coordinator's metered Demand in the UDC Service Area.

**11.2.4.5** [Not Used]  $UFE_{metd}$ , for each UDC, is defined for a specific period (during which Load profiles are applied to cumulative metered Load) as total imports and net Generation, minus UDC specific Transmission Losses in accordance with Section 7.4.3, minus exports, minus total metered Demand (hourly metered plus profiled cumulative metered).  $UFE_{metd}$  for the period is then allocated to each Scheduling Coordinator pro rata based on its total metered Demand in the UDC Service Area, to the total system Load in the UDC Service Area. All end use meter Demand is adjusted per metered and data collection procedures in Section 10.

**11.2.4.6** [Not Used]  $UFE_{ip}$  is UFE that remains unallocated after the non Load profiled related UFE ( $UFE_{metd}$ ) has been fully allocated. For each hour,  $UFE_{ip}$  in each UDC Service Area, is defined as total imports and net Generation, minus UDC Service Area specific Transmission Losses per Section 7.4.3, minus exports, minus total metered Demand (hourly metered plus profiled cumulative metered Demand) adjusted for  $UFE_{metd}$  per 11.2.8.1.  $UFE_{ip}$  is then allocated to each Scheduling

~~Coordinator pro rata based on the ratio of its total profiled metered Demand in the UDC Service Area, to the total profiled metered Demand in the UDC Service Area.~~

#### **11.2.5 Usage Charges.**

Usage Charges will be levied in accordance with Section 7.3.1 of this Tariff.

#### **11.2.6 Wheeling Through and Wheeling Out Transactions.**

The ISO shall calculate, account for and settle charges and payments for Wheeling Through and Wheeling Out transactions in accordance with Section 7.1.4 of this Tariff.

#### **11.2.7 Voltage Support and Black Start Charges.**

The ISO shall calculate, account for and settle charges and payments for Voltage Support and Black Start as set out in Sections 2.5.27.5, 2.5.27.6, 2.5.28.5 and 2.5.28.6 of this ISO Tariff.

#### **11.2.8 Reliability Must-Run Charges**

The ISO shall calculate and levy the charges for Reliability Must-Run Contract costs in accordance with Section 5.2.7 of this ISO Tariff.

#### **11.2.9 Neutrality Adjustments**

The ISO shall be authorized to levy additional charges or payments as special adjustments in regard to:

- (a) amounts required to round up any invoice amount expressed in dollars and cents to the nearest whole dollar amount in order to clear the ISO Clearing Account. These charges will be allocated amongst Scheduling Coordinators

- over an interval determined by the ISO and pro rata based on metered Demand (including exports) during that interval;
- (b) amounts in regard to penalties which may be levied by the ISO in accordance with the ISO Tariff. These charges will be levied on the Market Participants liable for payment of the penalty; and
- (c) amounts required to reach an accounting trial balance of zero in the course of the Settlement process in the event that the charges calculated as due from ISO Debtors are lower than payments calculated as due to the ISO Creditors for the same Trading Day. These charges will be allocated amongst the Scheduling Coordinators who traded on that Trading Day pro rata to their metered Demand (including exports) in MWh of Energy for that Trading Day. In the event that the charges due from ISO Debtors are higher than the payments due to ISO Creditors, the ISO shall allocate a payment to the Scheduling Coordinators who traded on that Trading Day pro rata to their metered Demand (including exports) in MWh of Energy for that Trading Day.

### **11.3 Billing and Payment Process.**

**11.3.1** The billing and payment process shall be based on the issuance of Preliminary and Final Settlement Statements for each ~~hourly~~ Settlement Period in each Trading Day. ~~All trading through the ISO on each Trading Day shall be settled~~

~~and paid for sixty five (65) days after the Trading Day or, if that day is not a Business Day, on the next succeeding Business Day.~~

~~11.3.2 The time periods specified in Sections 10, 11.3 and 11.6 of the ISO Tariff and in the Payments Calendar may be reviewed and modified from time to time by the ISO Governing Board. Payment for the charges referred to in Section 11.1.6 of the ISO Tariff (except for the charges payable under long term contracts) for each Trading Day in each calendar month shall be made sixty five (65) days after the last day of the relevant calendar month, or, if payment falls due on a day that is not a Business Day, on the next succeeding Business Day.~~

**11.3.3 [Not used]**

~~11.3.4 If the day on which any Preliminary Settlement Statement or Final Settlement Statement is due to be issued or payment is due to be made is not a Business Day, such statement shall be issued or payment shall be made on the next succeeding Business Day. If the date of issue of a Preliminary Settlement Statement was delayed pursuant to this Section, the date of issue of the corresponding Final Settlement Statement shall also be delayed accordingly.~~

**11.4 General Principles for Production of Settlement Statements.**

**11.4.1 Basis of Settlement.**

The basis of each Settlement Statement shall be the debiting or crediting of an account in the name of the relevant Scheduling Coordinator in the general ledger

set up by the ISO to reflect all transactions, charges or payments settled by the ISO.

#### **11.4.2 Right to Dispute.**

All Scheduling Coordinators shall have the right to dispute any item or calculation set forth in any Preliminary Settlement Statement in accordance with this ISO Tariff.

#### **11.4.3 Data Files.**

Settlement Statements relating to each Scheduling Coordinator shall be accompanied by a data file of supporting information that includes the following for each Settlement Period of the Trading Day on a Zone-by-Zone basis:

- (a) the aggregate quantity (in MWh) of Energy supplied or withdrawn by the Metered Entities represented by the Scheduling Coordinator;
- (b) the aggregate quantity (in MW) and type of Ancillary Services capacity provided or purchased;
- (c) the relevant prices that the ISO has applied in its calculations;
- (d) details of the Scheduled quantities of Energy and Ancillary Services accepted by the ISO in the Day-Ahead Market and the Hour-Ahead Market;
- (e) details of Imbalance Energy and penalty payments; and
- (f) detailed calculations of all fees, charges and payments allocated amongst Scheduling Coordinators and each Scheduling Coordinator's share; and
- ~~(g) the net amount payable or receivable.~~

**11.5 Calculation in the Event of Meter Failure or Lack of Meter Data for the Balancing of Market Accounts.**

Settlements shall not be cleared for final processing until the accounting trial balance is zero. ~~Where, in order to create a zero accounting trial balance, the ISO uses~~ In order to publish a Settlement Statement, the ISO may use estimated, disputed or calculated Meter Data, ~~any Settlement Statements based on such data shall be denoted as "estimated," "disputed" or "calculated," and a "conditional" denotation shall be included in the general ledger against the relevant data.~~ When actual verified Meter Data is available and all of the disputes raised by Scheduling Coordinators during the validation process described in Section 11.7 of this ISO Tariff have been determined, the ISO shall recalculate the amounts payable and receivable by the affected Scheduling Coordinators or by all Scheduling Coordinators, if applicable, as soon as reasonably practical and shall show any required adjustments as a debit or credit in the next Settlement Statement. ~~The net balance of all adjustments shall go into a balancing account as a debit or credit, to the Grid Management Charge. In the event that not all End Use Meter Data are available, the ISO shall denote that a recalculation is pending and continue with a partial settlement based on Meter Data which is not conditional.~~

**11.6 Settlements Cycle.****11.6.1 Timing of the Settlements Process.**

**11.6.1.1** The ISO shall provide to each Scheduling Coordinator for validation a Preliminary Settlement Statement of ~~the net amount~~ charges payable to or owed by the Scheduling Coordinator within forty seven (47) days of the relevant Trading Day, covering all Settlement Periods in that Trading Day.

**11.6.1.2** Each Scheduling Coordinator shall have a period of ~~twelve (12)~~ ten (10) days from receipt during which it may review the Preliminary Settlement Statement and notify the ISO of any errors. No later than sixty one (61) days after the Trading Day to which it relates, the ISO shall issue a Final Settlement Statement to each Scheduling Coordinator for that Trading Day.

**11.6.2 Basis for Billing and Payment.**

The Final Settlement Statement shall constitute the basis for billing and associated automatic funds transfer in accordance with this ISO Tariff. Each Scheduling Coordinator shall pay any net debit and shall be entitled to receive any net credit shown in a ~~Final Settlement Statement~~ an invoice on the Payment Date, whether or not there is any dispute regarding the amount of the debit or credit.

**11.6.3 Settlement Statement re-runs.**

The ISO is authorized to perform Settlement Statement re-runs following approval of the ISO Governing Board. A request to perform a Settlement Statement re-run may be made at any time by a Scheduling Coordinator by notice in writing to the

ISO Governing Board. The ISO Governing Board shall, in considering whether to approve a request for a Settlement Statement re-run, determine in its reasonable discretion, whether there is good cause to justify the performance of a Settlement Statement re-run.

**11.6.3.1** If a Settlement Statement re-run is ordered by the ISO Governing Board, the ISO shall arrange to have the Settlement Statement re-run carried out as soon as is reasonably practicable following the ISO Governing Board's order, subject to the availability of staff and computer time, compatible software, appropriate data and other resources.

**11.6.3.2** The cost of a Settlement Statement re-run shall be borne by the Scheduling Coordinator requesting it, unless the Settlement Statement re-run was needed due to a clerical oversight or error on the part of the ISO staff.

**11.6.3.3** Where a Settlement Statement re-run indicates that the accounts of Scheduling Coordinators should be debited or credited to reflect alterations to Settlements previously made under this ISO Tariff, for those Scheduling Coordinators affected by the statement re-run, the ISO shall reflect the amounts to be debited or credited in the next Preliminary Settlement Statements that it issues following the Settlement Statement re-run to which the provisions of this Section 11 apply. The net balance of all adjustments shall go into a balancing account, on a debit or credit, to the Grid Management Charge.

**11.7 Confirmation and Validation.****11.7.1 Confirmation.**

It is the responsibility of each Scheduling Coordinator to notify the ISO if it fails to receive a Preliminary Settlement Statement or a Final Settlement Statement on the date specified for the publication of such Settlement Statement in the ISO Payments Calendar. Each Scheduling Coordinator shall be deemed to have received its Settlement Statement on the dates specified, unless it notifies the ISO to the contrary.

**11.7.2 Validation.**

Each Scheduling Coordinator shall have the opportunity to review the terms of the Preliminary Settlement Statements that it receives. The Scheduling Coordinator shall be deemed to have validated each Preliminary Settlement Statement unless it has raised a dispute or reported an exception within ~~twelve (12)~~ ten (10) days.

Once validated, a Preliminary Settlement Statement shall be binding on the Scheduling Coordinator to which it relates, unless the ISO performs a Settlement re-run pursuant to Section 11.6.3 of this ISO Tariff.

**11.8 Payment Procedures.****11.8.1 All Payments to Be Made Through the ISO.**

All Scheduling Coordinators shall discharge their obligations to pay the amounts owed by them and shall receive payments of all amounts owed to them under this ISO Tariff only through the ISO.

**11.8.2 Accounts to be Established.**

The ISO shall establish and operate the following accounts:

**11.8.2.1** An ISO Clearing Account to and from which all payments are made;

**11.8.2.2** An ISO Reserve Account from which any debit balances on the ISO Clearing Account at the close of banking business on each Business Day shall be settled or reduced in accordance with this ISO Tariff. The ISO shall use the security provided by a Scheduling Coordinator pursuant to Section 2.2.3.2 of this ISO Tariff, if necessary, to ~~secure~~ clear any debit balances on the ISO Reserve Account that may arise as a result of that Scheduling Coordinator's failure to pay an amount due under this ISO Tariff.

**11.8.2.3** Such other accounts as the ISO deems necessary or convenient for the purpose of efficiently implementing the funds transfer system under this ISO Tariff.

**11.8.3 Declaration of Trust.**

All ISO Accounts established pursuant to Section 11.8.2 of this ISO Tariff shall be opened and operated by the ISO on trust for ISO Creditors, in accordance with this ISO Tariff. Each such account shall be maintained at a bank or other financial institution in California and shall bear a name indicating that it is a trust account.

**11.8.4 No Co-Mingling.**

The ISO shall not co-mingle any funds standing to the credit of an ISO Account with its other funds and shall promptly withdraw any amounts paid into an ISO Account representing amounts paid for the account of the ISO.

**11.9 Invoices.**

The ISO shall prepare and send to each Scheduling Coordinator ~~with the Final Settlement Statement an invoice showing amounts which, according to the Final Settlement Statement,~~ an invoice based on the Final Settlement Statement(s) showing amounts which are to be paid by or to each Scheduling Coordinator, the Payment Date, being the date on which such amounts are to be paid or received and details of the ISO Clearing Account to which any amounts owed by Scheduling Coordinators are to be paid.

**11.10 Instructions for Payment.**

Each Scheduling Coordinator shall remit to the ISO Clearing Account the amount shown on the invoice as payable by that Scheduling Coordinator for value not later than 10:00 a.m. on the Payment Date.

**11.11 ISO's Responsibilities.**

On the due date for payment of amounts shown ~~on a Final Settlement Statement in~~ an invoice, the ISO shall ascertain whether all amounts required to be remitted to the ISO Clearing Account have been credited to it. If any such amount has not been so credited, it shall ascertain which Scheduling Coordinators have failed to pay the amount owed by them and it may take steps to recover any overdue amount.

**11.12 Non-payment by a Scheduling Coordinator.**

If a Scheduling Coordinator becomes aware that a payment for which it is responsible will not be remitted to the ISO Clearing Account on time, it shall immediately notify the ISO of the fact and the reason for the non-payment. If the Scheduling Coordinator fails to pay any sum to the ISO when due and the ISO is unable to enforce any guarantee, letter of credit or other credit support provided by the defaulting Scheduling Coordinator, the Scheduling Coordinator shall pay interest on the overdue amount at the ISO Default Interest Rate for the period from the Payment Date to the date on which the payment is remitted to the ISO Clearing Account.

**11.13 Payment to ISO Creditors.**

The ISO shall calculate the amounts available for distribution to ISO Creditors on the Payment Date and, ~~not later than 1.00 p.m. on the Payment Date,~~ shall give irrevocable instructions to the ISO Bank to remit from the ISO Clearing Account to the relevant Settlement Accounts maintained by the ISO Creditors, the aggregate amounts determined by the ISO to be available for payment to ISO Creditors for value by close of business on the Payment Date. If required, the ISO shall instruct the ISO Bank to transfer amounts from the ISO Reserve Account to enable the ISO Clearing Account to clear.

**11.14 Using the ISO Reserve Account.**

The ISO Reserve Account shall be available to the ISO for the purpose of providing funds to clear the ISO Clearing Account in the event that there are insufficient funds in the ISO Clearing Account to pay ISO Creditors. If the ISO Reserve Account is drawn upon, the ISO shall as soon as possible thereafter take any necessary steps against the defaulting Scheduling Coordinator, including making any calculations or taking any other appropriate action, to replenish the ISO Reserve Account including drawing on any credit support provided by the defaulting Scheduling Coordinator pursuant to Section 2.2.3.2 of this ISO Tariff or serving demands on any defaulting Scheduling Coordinators with an Approved Credit Rating.

**11.15 Prohibition on transfers.**

The ISO shall at no time instruct the ISO Bank to transfer any sum from an ISO Account to another account (not being an ISO Account) unless that account is a Settlement Account or the amount is owed to the ISO under this ISO Tariff.

**11.16 Alternative Payment Procedures.****11.16.1 Pro Rata Reduction to Payments.**

If it is not possible to clear the ISO Clearing Account on a Payment Date because of an insufficiency of funds available in the ISO Reserve Account or by enforcing any guarantee, letter of credit or other credit support provided by a defaulting

Scheduling Coordinator, the ISO shall reduce payments to all ISO Creditors proportionately to the net amounts payable to them on the relevant Payment Date to the extent necessary to clear the ISO Clearing Account. The ISO shall account for such reduction in the ISO ledger accounts as amounts due and owing by the non-paying ISO Debtor to each ISO Creditor whose payment was so reduced.

#### **11.17 [DELETED]**

#### **11.18 Payment Errors.**

##### **11.18.1 Overpayments.**

If for any reason, including the negligence of the ISO Bank or the ISO, an ISO Creditor receives an overpayment on any Payment Date, the ISO Creditor shall within two (2) Business Days from the date of receipt of the funds into its Scheduling Coordinator Settlement Account, notify the ISO of the amount of the overpayment and shall forthwith pay the overpayment into an ISO Account specified by the ISO.

##### **11.18.2 Repayment of Overpayment.**

If prior to an ISO Creditor notifying the ISO of the overpayment, the ISO receives notice (from the ISO Bank or otherwise) of the overpayment, the ISO shall within two (2) Business Days notify the recipient of the overpayment. The ISO shall be responsible for payment to those entitled to the sum which has been overpaid.

**11.18.3 Underpayments.**

If for any reason, including the negligence of the ISO Bank or the ISO, an ISO Creditor receives on the relevant Payment Date an underpayment, the ISO Creditor shall within two (2) Business Days from receipt into its Settlement Account, notify the ISO of the amount of the underpayment, and the ISO after consultation with the ISO Bank, shall use all reasonable endeavors to identify such entity as shall have received any corresponding overpayment and promptly correct the underpayment. If, by reason of negligence, the ISO holds or has under its control after five (5) Business Days from receipt in the ISO Clearing Account amounts which it ought properly to have paid to ISO Creditors, such ISO Creditors shall be entitled to interest on such amounts at the ISO Default Interest Rate, for such period as the ISO improperly holds or has such amounts under its control.

**11.19 Defaults.**

Each ISO Creditor shall give notice to the ISO before instituting any action or proceedings in any court against an ISO Debtor to enforce payments due to it.

**11.20 Proceedings to Recover Overdue Amounts.****11.20.1 Proceedings Brought by the ISO.**

Without prejudice to the right of any Scheduling Coordinator to bring such proceedings as it sees fit in connection with matters related to the recovery of amounts owed to it, the ISO may bring proceedings against any Scheduling

Coordinator on behalf of those Scheduling Coordinators who have indicated to the ISO their willingness for the ISO first so to act, for the recovery of any amounts due by that Scheduling Coordinator, if the ISO has first reached agreement with the Scheduling Coordinators as to the appropriate remuneration, is indemnified to its reasonable satisfaction and receives such security as it may reasonably request against all costs, claims, expenses (including legal fees) and liabilities which it will or may sustain or incur in complying with such instructions.

#### **11.20.2 Evidence of Unpaid Amount.**

The ISO shall, on request, certify in writing the amounts owed by an ISO Debtor that remain unpaid and the ISO Creditors to whom such amounts are owed and shall provide certified copies of the relevant Final Settlement Statements, invoices and other documentation on which the ISO's certificate was based to the ISO Debtor and the relevant ISO Creditors. An ISO certificate given under this Section 11.20.2 may be used as prima facie evidence of the amount due by an ISO Debtor to ISO Creditors in any legal proceedings.

#### **11.21 Data Gathering and Storage.**

##### **11.21.1 Required Capabilities.**

The ISO shall ensure that the Settlement process shall contain, at a minimum, the following data gathering and storage capabilities:

- (a) the accurate, time-sequenced, end-to-end traceability of the Settlements process so that Scheduling Coordinators and Participating TOs can fully verify their Settlement Statements;
- (b) the ability to specify and accept data that is specifically needed for audit trail requirements; and
- (c) the archiving of meter data, Settlement Runs and other information used to prepare Settlement Statements to be consistent with the time frame required to re-run the Settlement process by state laws and the rules of the Local Regulatory Authority.

#### **11.21.2 Data Dissemination.**

Data shall not be disseminated by the ISO except as permitted in this ISO Tariff.

#### **11.22 Confidentiality.**

The ISO shall implement and maintain a system of communications with Scheduling Coordinators that includes the strict use of passwords for access to data to ensure compliance with Section 20.3.

#### **11.23 Communications.**

Preliminary Settlement Statements, Final Settlement Statements, invoices and confirmation notices will be considered issued to ISO Creditors or ISO Debtors when released by the ISO via direct computer link. If there is a failure of a communication system and it is not possible to communicate by electronic means,

then the ISO or ISO Creditor or ISO Debtor, as the case may be, shall communicate by facsimile but only if the recipient is first advised by telephone to expect the facsimile.

## **11.24 ISO Payments Calendar.**

### **11.24.1 Preparation.**

No later than 31 October in each year, the ISO shall publish an ISO Payments Calendar showing, for the period from 1 January to 31 December in the next succeeding year (both dates inclusive), the dates on which Settlement Statements shall be published by the ISO and the Payment Dates on which the ISO will pay the Participating TO the Wheeling revenues allocated to them pursuant to Section 7.1.4.3 of this ISO Tariff.

### **11.24.2 Distribution.**

Any ISO Payments Calendar prepared pursuant to this Section 11.24 shall be distributed promptly to each Scheduling Coordinator, each Participating TO, the ISO Bank, the ISO Audit Committee and the ISO Governing Board and shall be published on WEnet.

**12. AUDITS.****12.1 Materials Subject to Audit.**

The ISO's financial books, cost statements, accounting records and all documentation pertaining to its operation as a state chartered independent institution which controls the operation of the ISO Controlled Grid to ensure open, non-discriminatory transmission access to all Market Participants and promotes the efficient use and reliable operation of the ISO Controlled Grid in accordance with this ISO Tariff, are subject to audit in the manner prescribed below:

**12.2 ISO Audit Committee.**

The ISO Governing Board shall have overall audit responsibility for the ISO. The ISO Audit Committee shall make recommendations to the ISO Governing Board in relation to the approval, initiation and scheduling of the following audits:

**12.2.1 Certified Financial Statement Audit.**

Each year, an audit by an external independent certified public accounting firm shall be performed. This audit will be conducted in accordance with generally accepted auditing standards to verify that the ISO's financial statements are in compliance with generally accepted accounting principles and fairly present, in all material respects, the financial position, results of operation and cash flows for the audit period. The audit report will be addressed to the ISO Governing Board,

copies will be provided to the ISO Audit Committee, and, upon request, to Market Participants.

#### **12.2.2 Operations Audit.**

Each year, an independent accounting firm shall review the ISO management's compliance with its operations policies and procedures. The ISO Audit Committee will appoint an independent firm to do this audit. This audit may also include material issues raised by Market Participants and approved by the ISO Audit Committee for inclusion in the audit scope. The audit report will be addressed to the ISO Governing Board, copies provided to the ISO Audit Committee, and upon request, to Market Participants.

#### **12.2.3 Code of Conduct Audits.**

On a periodic basis, but not less than once a year, an independent accounting firm shall conduct a management review of governors, officers, employees, substantially full-time consultants, or contractors of the ISO for compliance with the ISO Code of Conduct to ensure adherence to the highest standards of lawful and ethical conduct in their activities. The audit report shall be addressed to the ISO Audit Committee with copies provided to the ISO Governing Board and, upon request, to Market Participants.

#### **12.2.4 Interim Audits.**

At such other intervals agreed upon by a majority of the ISO Audit Committee members, audits may be undertaken for specific issues and concerns of Market

Participants that the ISO Audit Committee believes, at its sole discretion, to be of significant and critical magnitude to the ISO. Such audits will be conducted by an independent accounting firm. The costs of such an audit will be borne by the requesting Market Participant(s), unless the ISO Audit Committee determines otherwise. Interim audits will be conducted during normal business hours, after reasonable notice has been given to the ISO, and in accordance with the guidelines to be established by the ISO Audit Committee.

### **12.3 Audit Results.**

Exceptions identified as a result of an audit will be reviewed with the ISO Audit Committee. The results of the audits and actions to be taken by the ISO as a result of the audit shall be mailed to Market Participants upon request.

### **12.4 Availability of Records.**

The ISO will provide full and complete access to all financial books, cost statements, accounting records, and all documentation pertaining to the requirements of the specific audits being performed. Records relating to audits will be retained until the records retention requirements of the ISO are satisfied or until the audit issues are fully resolved, whichever is the later. The right of access to records does not require the creation of new records, reports, studies, or evaluations not already available.

**12.5 Confidentiality of Information.**

All proprietary information obtained through any audits will remain strictly confidential. All auditors shall sign a confidentiality agreement prior to being accepted as auditors by the ISO Audit Committee.

**12.6 Payments.**

Any payments agreed to between Market Participants and the ISO as a result of an audit, or directed by FERC, or disclosed by the ISO in reviews of its own books and records shall include interest computed at the rate calculated in accordance with the methodology specified for interest on refunds in FERC's regulations at 18 C.F.R §35.19(a)(2)(iii) (as amended from time to time) from the due date to the date such adjustments are due.

**13. DISPUTE RESOLUTION.****13.1 Applicability.****13.1.1 General Applicability.**

Except as limited below or otherwise as limited by law (including the rights of any party to file a complaint with FERC under the relevant provisions of the FPA), the ISO ADR Procedures shall apply to all disputes between parties which arise under the ISO Documents except where the decision of the ISO is stated in the provisions of this ISO Tariff to be final. The ISO ADR Procedures shall not apply to:

**13.1.1.1** Disputes arising under contracts which pre-date the ISO Operations Date, except as the disputing parties may otherwise agree; and

**13.1.1.2** Disputes as to whether rates and charges set forth in this ISO Tariff are just and reasonable under the FPA.

**13.1.2 Disputes Involving Government Agencies.**

**13.1.2.1** If a party to a dispute is a government agency the procedures herein which provide for the resolution of claims and arbitration of disputes are subject to any limitations imposed on the agency by law, including but not limited to the authority of the agency to effect a remedy. If the governmental agency is a federal entity, the procedures herein shall not apply to disputes involving issues arising under the United States Constitution.

**13.1.3 Injunctive and Declaratory Relief.**

Where the court having jurisdiction so determines, use of the ISO ADR Procedures shall not be a condition precedent to a court action for injunctive relief nor shall the provisions of California Code of Civil Procedures sections 1281 *et seq.* apply to such court actions.

**13.2 Negotiation and Mediation.****13.2.1 Negotiation.**

The ISO and Market Participants (party or parties) shall make good-faith efforts to negotiate and resolve any dispute between them arising under ISO Documents prior to invoking the ISO ADR Procedures outlined herein. Each party shall designate an individual with authority to negotiate the matter in dispute to participate in such negotiations.

**13.2.2 Statement of eClaim.**

In the event a dispute is not resolved through such good-faith negotiations, any one of the parties may submit a statement of claim, in writing, to each other disputing party, the ISO ADR Committee, and the ISO Governing Board, which submission shall commence the ISO ADR Procedures. The statement of claim shall set forth in reasonable detail (i) each claim, (ii) the relief sought, including the proposed award, if applicable, (iii) a summary of the grounds for such relief and the basis for each claim, (iv) the parties to the dispute, and (v) the individuals having knowledge of each claim. The other parties to the dispute shall similarly

submit their respective statements of claim within fourteen (14) days of the date of the initial statement of claim or such longer period as the chair of the ISO ADR Committee may permit following an application by the responding party. If any responding party wishes to submit a counterclaim in response to the statement of claim, it shall be included in such party's responsive statement of claim. A summary of the statements of claim shall be published by the ISO in the ISO newsletter or WEnet, and any other method adopted by the ISO ADR Committee. No Market Participant shall be considered as having received notice of a claim decided or relief granted by a decision made under these procedures unless the summary of the statements of claim published by the ISO includes such claim or relief.

### **13.2.3 Selection of Mediator.**

After submission of the statements of claim, the parties may request mediation, if at least 75% of the disputing parties so agree, except that where a dispute involves three parties, at least two of the parties must agree to mediation. If the parties agree to mediate, the chair of the ISO ADR Committee shall distribute to the parties by facsimile or other electronic means a list containing the names of at least seven prospective mediators with mediation experience, or with technical or business experience in the electric power industry, or both, as he or she shall deem appropriate to the dispute. The parties shall either agree upon a mediator from the list provided or from any alternative source, or alternate in striking names

from the list with the last name on the list becoming the mediator. The first party to strike off a name from the list shall be determined by lot. The parties shall have seven days from the date of receipt of the ISO ADR Committee chair's list of prospective mediators to complete the mediator selection process and appoint the mediator, unless the time is extended by mutual agreement. The mediator shall comply with the requirements of Section 13.3.2.

#### **13.2.4 Mediation.**

The mediator and representatives of the disputing parties, with authority to settle the dispute, shall within fourteen (14) days after the mediator's date of appointment schedule a date to mediate the dispute. Matters discussed during the mediation shall be confidential and shall not be referred to in any subsequent proceeding. With the consent of all disputing parties, a resolution may include referring the dispute directly to a technical body (such as a WSCC technical advisory panel) for resolution or an advisory opinion, or referring the dispute directly to FERC. The ISO shall publish notice of the referral of the dispute in the ISO newsletter or WEnet, and any other method adopted by the ISO ADR Committee.

#### **13.2.5 Demand for Arbitration.**

If the disputing parties have not succeeded in negotiating a resolution of the dispute within thirty (30) days of the initial statement of claim or, if within that period the parties agreed to mediate, within thirty (30) days of the parties first

meeting with the mediator, such parties shall be deemed to be at impasse and any such disputing party may then commence the arbitration process, unless the parties by mutual agreement agree to extend the time. A party seeking arbitration shall provide notice of its demand for arbitration to the other disputing parties, the ISO ADR Committee and the ISO Governing Board, which shall publish notice of such demand in the ISO newsletter or electronic bulletin board, and any other method adopted by the ISO ADR Committee.

### **13.3 Arbitration.**

#### **13.3.1 Selection of Arbitrator.**

**13.3.1.1 Disputes Under \$1,000,000.** Where the total amount of claims and counterclaims in controversy is less than \$1,000,000 (exclusive of costs and interest), the disputing parties shall select an arbitrator from a list containing the names of at least 10 qualified individuals supplied by the ISO ADR Committee, or if the ISO is a party to the dispute, the names of at least ten (10) qualified individuals supplied by the American Arbitration Association within 14 days following submission of the demand for arbitration. If the parties cannot agree upon an arbitrator within the stated time, they shall take turns striking names from the list of proposed arbitrators. The first party to strike-off a name shall be determined by lot. This process shall be repeated until one name remains on the list, and that individual shall be the designated arbitrator.

**13.3.1.2 Disputes of \$1,000,000 or Over.** Where the total amount of claims and counterclaims in controversy is \$1,000,000 or more (exclusive of interest and costs), the disputing parties may agree on any person to serve as a single arbitrator, or shall endeavor in good faith to agree on a single arbitrator from a list of ten (10) qualified individuals provided by the ISO ADR Committee, or if the ISO is a party to the dispute, the names of at least ten (10) qualified individuals supplied by the American Arbitration Association within fourteen (14) days following submission of the demand for arbitration. If the parties are unable to agree on a single arbitrator within the stated time, the party or parties demanding arbitration, and the party or parties responding to the demand for arbitration, shall each designate an arbitrator. Each designation shall be from the ISO ADR Committee list of arbitrators no later than the tenth (10th) day thereafter. The two arbitrators so chosen shall then choose a third arbitrator.

**13.3.2 Disclosures Required of Arbitrators.**

The designated arbitrator(s) shall be required to disclose to the parties any circumstances which might preclude him or her from rendering an objective and impartial determination. Each designated arbitrator shall disclose:

**13.3.2.1** Any direct financial or personal interest in the outcome of the arbitration;

**13.3.2.2** Any information required to be disclosed by California Code of Civil Procedure Section 1281.9.; and

**13.3.2.3** Any existing or past financial, business, professional, or personal interest that are likely to affect impartiality or might reasonably create an appearance of partiality or bias. The designated arbitrator shall disclose any such relationships that he or she personally has with any party or its counsel, or with any individual whom they have been told will be a witness. They should also disclose any such relationship involving members of their families or their current employers, partners, or business associates. All designated arbitrators shall make a reasonable effort to inform themselves of any interests or relationships described above. The obligation to disclose interests, relationships, or circumstances that might preclude an arbitrator from rendering an objective and impartial determination is a continuing duty that requires the arbitrator to disclose, at any stage of the arbitration, any such interests, relationships, or circumstances that arise, or are recalled or discovered. If, as a result of the continuing disclosure duty, an arbitrator makes a disclosure which is likely to affect his or her impartiality, or might reasonably create an appearance of partiality or bias or if a party independently discovers the existence of such circumstances, a party wishing to object to the continuing use of the arbitrator must provide written notice of its objection to the other parties within ten (10) days of receipt of the arbitrator's disclosure or the date of a party's discovery of the circumstances giving rise to that party's objection. Failure to provide such notice shall be deemed a waiver of such objection. If a party timely provides a notice of objection to the continuing

use of the arbitrator the parties shall attempt to agree whether the arbitrator should be dismissed and replaced in the manner described in Section 13.3.1. If within ten (10) days of a party's objection notice the parties have not agreed how to proceed the matter shall be referred to the ISO ADR Committee for resolution.

### **13.3.3 Arbitration Procedures.**

The ISO ADR Committee shall compile and make available to the arbitrator and the parties standard procedures for the arbitration of disputes, which procedures (i) shall include provision, upon good cause shown, for intervention or other participation in the proceeding by any party whose interests may be affected by its outcome, (ii) shall conform to the requirements specified herein, and (iii) may be modified or adopted for use in a particular proceeding as the arbitrator deems appropriate, in accordance with Section 13.3.4. The procedures adopted by the ISO ADR Committee shall be based on the latest edition of the American Arbitration Association Commercial Arbitration Rules, to the extent such rules are not inconsistent with this Section 13. Except as provided herein, all parties shall be bound by such procedures.

### **13.3.4 Modification of Arbitration Procedures.**

In determining whether to modify the standard procedures for use in the pending matter, the arbitrator shall consider (i) the complexity of the dispute, (ii) the extent to which facts are disputed, (iii) the extent to which the credibility of witnesses is relevant to a resolution, (iv) the amount in controversy, and (v) any

representations made by the parties. Alternatively, the parties may, by mutual agreement, modify the standard procedures. In the event of a disagreement between the arbitrator and the agreement of the parties regarding arbitration procedures to be utilized, the parties' agreement shall prevail.

### **13.3.5 Remedies.**

**13.3.5.1 Arbitrator's Discretion.** The arbitrator shall have the discretion to grant the relief sought by a party, or determine such other remedy as is appropriate, unless the parties agree to conduct the arbitration "baseball" style. Unless otherwise expressly limited herein, the arbitrator shall have the authority to award any remedy or relief available from FERC, or any other court of competent jurisdiction. Where any ISO Document leaves any matter to be agreed between the parties at some future time and provides that in default of agreement the matter shall be referred to the ISO ADR Procedures, the arbitrator shall have authority to decide upon the terms of the agreement which, in the arbitrator's opinion, it is reasonable that the parties should reach, having regard to the other terms of the ISO Document concerned and the arbitrator's opinion as to what is fair and reasonable in all the circumstances.

**13.3.5.2 "Baseball" Arbitration.** If the parties agree to conduct the arbitration "baseball" style, the parties shall submit to the arbitrator and exchange with each other their last best offers in the form of the award they consider the arbitrator should make, not less than seven (7) days in advance of the date fixed for the

hearing, or such other date as the arbitrator may decide. If a party fails to submit its last best offer in accordance with this Section, that party shall be deemed to have accepted the offer proposed by the other party. The arbitrator shall be limited to awarding only one of the proposed offers, and may not determine an alternative or compromise remedy.

#### **13.3.6 Summary Disposition.**

The procedures for arbitration of a dispute shall provide a means for summary disposition of a demand for arbitration, or a response to a demand for arbitration, that in the reasoned opinion of the arbitrator does not have a good faith basis in either law or fact. If the arbitrator determines that a demand for arbitration or response to a demand for arbitration does not have a good faith basis in either law or fact, the arbitrator shall have discretion to award the costs of the time, expenses, and other charges of the arbitrator to the prevailing party. A determination made under this Section is subject to appeal pursuant to Section 13.4.

#### **13.3.7 Discovery Procedures.**

The procedures for the arbitration of a dispute shall include adequate provision for the discovery of relevant facts, including the taking of testimony under oath, production of documents and other things, the presentation of evidence, the taking of samples, conducting of tests, and inspection of land and tangible items. The nature and extent of such discovery shall be determined as provided herein

and shall take into account (i) the complexity of the dispute, (ii) the extent to which facts are disputed, (iii) the extent to which the credibility of witnesses is relevant to a resolution, and (iv) the amount in controversy. The forms and methods for taking such discovery shall be as described in the Federal Rules of Civil Procedure, except as modified pursuant to Section 13.3.4.

#### **13.3.8 Evidentiary Hearing.**

The arbitration procedures shall provide for an evidentiary hearing, with provision for the cross-examination of witnesses, unless all parties consent to the resolution of the matter on the basis of a written record. The forms and methods for taking evidence shall be determined by the arbitrator(s) and modified pursuant to Section 13.3.4. The arbitrator may require such written or other submissions from the parties as he or she may deem appropriate, including submission of direct and rebuttal testimony of witnesses in written form. The arbitrator may exclude any evidence that is irrelevant, immaterial, unduly repetitious or prejudicial, or privileged. The arbitrator shall compile a complete evidentiary record of the arbitration which shall be available to the parties on its completion upon request.

#### **13.3.9 Confidentiality.**

Subject to the other provisions of this ISO Tariff, any party may claim that information contained in a document otherwise subject to discovery is "Confidential" if such information would be so characterized under the Federal Rules of Evidence. The party making such claim shall provide to the arbitrator in

writing the basis for its assertion. If the claim of confidentiality is confirmed by the arbitrator, he or she shall establish requirements for the protection of such documents or other information designated as "Confidential" as may be reasonable and necessary to protect the confidentiality and commercial value of such information. Any party disclosing information in violation of these provisions or requirements established by the arbitrator, unless such disclosure is required by federal or state law or by a court order, shall thereby waive any right to introduce or otherwise use such information in any judicial, regulatory, or other legal or dispute resolution proceeding, including the proceeding in which the information was obtained.

#### **13.3.10 Timetable.**

Promptly after the appointment of the arbitrator, the arbitrator shall set a date for the issuance of the arbitration decision, which shall be no later than six months (or such earlier date as the parties and the arbitrator may agree) from the date of the appointment of the arbitrator, with other dates, including the dates for an evidentiary hearing or other final submissions of evidence, set in light of this date. The date for the evidentiary hearing or other final submission of evidence shall not be changed, absent extraordinary circumstances. The arbitrator shall have the power to impose sanctions, including dismissal of the proceeding, for dilatory tactics or undue delay in completing the arbitration proceedings.

**13.3.11 Decision.**

**13.3.11.1** Except as provided below with respect to "baseball" style arbitration, the arbitrator shall issue a written decision granting the relief requested by one of the parties, or such other remedy as is appropriate, if any, and shall include findings of fact and law. The arbitration decision shall be based on (i) the evidence in the record, (ii) the terms of the relevant ISO Documents, (iii) applicable United States federal law, including the FPA and any applicable FERC regulations and decisions, and international treaties or agreements as applicable, and (iv) applicable state law. Additionally, the arbitrator may consider relevant decisions in previous arbitration proceedings. A summary of the disputed matter and the arbitrator's decision shall be published in an ISO newsletter or electronic bulletin board and any other method adopted by the ISO ADR Committee, and maintained by the ISO ADR Committee.

**13.3.11.2** In arbitration conducted "baseball" style, the arbitrator shall issue a written decision adopting one of the awards proposed by the parties, and shall include findings of fact and law. The arbitration decision shall be based on (i) the evidence in the record, (ii) the terms of the relevant ISO Documents (iii) applicable United States federal law, including the FPA and any applicable FERC regulations and decisions, and international treaties or agreements as applicable, and (iv) applicable state law. If the arbitrator concludes that no proposed award is consistent with the factors enumerated in (i) through (iv) above, or addresses all of

the issues in dispute, the arbitrator shall specify how each proposed award is deficient and direct that the parties submit new proposed awards that cure the identified deficiencies. A summary of the disputed matter and the arbitrator's decision shall be published in an ISO newsletter or electronic bulletin board, and any other method adopted by the ISO ADR Committee. An award shall not be deemed to be precedential.

**13.3.11.3** Where a panel of arbitrators is appointed pursuant to Section 13.3.1.2, a majority of the arbitrators must agree on the decision.

**13.3.12 Compliance.**

Unless the arbitrator's decision is appealed under Section 13.4, the disputing parties shall, upon receipt of the decision, immediately take whatever action is required to comply with the award to the extent the award does not require regulatory action. An award that is not appealed shall be deemed to have the same force and effect as an order entered by the FERC or any court of competent jurisdiction.

**13.3.13 Enforcement.**

Following the expiration of the time for appeal of an award pursuant to Section 13.4.3, any party may apply to FERC or any court of competent jurisdiction for entry and enforcement of judgment based on the award.

**13.3.14 Costs.**

The costs of the time, expenses, and other charges of the arbitrator shall be borne by the parties to the dispute, with each side on an arbitrated issue bearing its pro-rata share of such costs, and each party to an arbitration proceeding bearing its own costs and fees. If the arbitrator determines that a demand for arbitration or response to a demand for arbitration was made in bad faith, the arbitrator shall have discretion to award the costs of the time, expenses, and other charges of the arbitrator to the prevailing party. Notwithstanding the above, at the discretion of the arbitrator, the winning party in any dispute which has resulted in the enforcement of an important right affecting the public interest shall not be required to pay any of the costs of the arbitrator and may recover such of its own reasonable attorney fees, expert witness fees and other reasonable costs from the losing party to the dispute if (a) a significant benefit, whether pecuniary or non-pecuniary, has been conferred on the general public, (b) the necessity and financial burden of private enforcement are such as to make the award appropriate, and (c) such fees should not, in the interest of justice, be paid out of the recovery.

**13.4 Appeal of Award.****13.4.1 Basis for Appeal.**

A party may apply to the FERC or any court of competent jurisdiction to hear an appeal of an arbitration award only upon the grounds that the award is contrary to

or beyond the scope of the relevant ISO Documents, United States federal law, including, without limitation, the FPA, and any FERC regulations and decisions, or state law. Appeals shall, unless otherwise ordered by FERC or the court of competent jurisdiction, conform to the procedural limitations set forth in this Section 13.4.

#### **13.4.2 Appellate Record.**

The parties intend that FERC or the court of competent jurisdiction should afford substantial deference to the factual findings of the arbitrator. No party shall seek to expand the record before the FERC or court of competent jurisdiction beyond that assembled by the arbitrator, except (i) by making reference to legal authority which did not exist at the time of the arbitrator's decision, or (ii) if such party contends the decision was based upon or affected by fraud, collusion, corruption, misconduct or misrepresentation.

#### **13.4.3 Procedures for Appeals.**

**13.4.3.1** If a party to an arbitration desires to appeal an award, it shall provide a notice of appeal to the ISO Governing Board, all parties and the arbitrator within 14 days following the date of the award. The appealing party must likewise provide notice to the ISO ADR Committee, which shall publish notice of the appeal in an ISO newsletter or on WEnet, and any other method adopted by the ISO ADR Committee. Within ten (10) days of the filing of the notice of appeal, the appealing party must file an appropriate application, petition or motion with the

FERC to trigger review under the FPA or with a court of competent jurisdiction.

Such filing shall state that the subject matter has been the subject of an arbitration pursuant to the relevant ISO Document.

**13.4.3.2** Within 30 days of filing the notice of appeal (or such period as FERC or the court of competent jurisdiction may specify) the appellant shall file the complete evidentiary record of the arbitration and a copy of the award with FERC or with the court of competent jurisdiction. The appellant shall serve copies of a description of all materials included in the submitted evidentiary record.

**13.4.4 Award Implementation.**

Implementation of the award shall be deemed stayed pending an appeal unless and until, at the request of a party, the FERC or the court of competent jurisdiction to which an appeal has been filed, issues an order dissolving, shortening, or extending such stay. However, a summary of each appeal shall be published in an ISO newsletter or electronic bulletin board, and any other method adopted by the ISO ADR Committee.

**13.4.5 Judicial Review of FERC Orders.**

FERC orders resulting from appeals shall be subject to judicial review pursuant to the FPA.

## 14. LIABILITY AND INDEMNIFICATION.

### 14.1 Liability for Damages.

Except as provided for in ~~Schedule~~ Section 13.3.14, the ISO shall not be liable in damages to any Market Participant for any losses, damages, claims, liability, costs or expenses (including legal expenses) arising from the performance or non-performance of its obligations under this ISO Tariff, including but not limited to any adjustments made by the ISO in Inter-Scheduling Coordinator Trades, except to the extent that ~~its breach of the provisions of this ISO Tariff results directly in physical damage to property owned, operated by or under the Operational Control of any Market Participant or in the death or injury of any person~~ they result from negligence or intentional wrongdoing on the part of the ISO.

### 14.2 Exclusion of Certain Types of Loss.

The ISO shall not be liable to any Market Participant under any circumstances for any consequential or indirect financial loss including but not limited to loss of profit, loss of earnings or revenue, loss of use, loss of contract or loss of goodwill except to the extent that it results from ~~resulting from physical damage to property for which the ISO may be liable under Section 14.1~~ except to the extent that it results from negligence or intentional wrongdoing on the part of the ISO.

**14.3 Market Participant's Indemnity.**

Each Market Participant, to the extent permitted by law, shall indemnify the ISO and hold it harmless against all losses, damages, claims, liabilities, costs or expenses (including legal expenses) arising from any act or omission of the Market Participant except to the extent that they result from the ISO's default under this ISO Tariff or negligence or intentional wrongdoing on the part of the ISO or of its officers, directors or employees.

**15. UNCONTROLLABLE FORCES.**

**15.1** An Uncontrollable Force means any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm, flood, earthquake, explosion, any curtailment, order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities or any other cause beyond the reasonable control of the ISO or Market Participant which could not be avoided through the exercise of Good Utility Practice. Neither the ISO nor a Market Participant will be considered in default of any obligation under this ISO Tariff if prevented from fulfilling that obligation due to the occurrence of an Uncontrollable Force.

**15.2** In the event of the occurrence of an Uncontrollable Force, which prevents the ISO or a Market Participant from performing any of its obligations under this ISO Tariff, the affected entity shall (i) if it is the ISO, immediately notify the Market Participants in writing of the occurrence of such Uncontrollable Force and, if it is a Market Participant, immediately notify the ISO in writing of the occurrence of such Uncontrollable Force, (ii) not be entitled to suspend performance of its obligations under this ISO Tariff in any greater scope or for any longer duration than is required by the Uncontrollable Force, (iii) use its best efforts to mitigate the effects of such Uncontrollable Force, remedy its inability to perform and resume full performance of its obligations hereunder, (iv) in the case of the ISO, keep the Market Participants apprised of such efforts, and in the case of the Market

Participants, keep the ISO apprised of such efforts, in each case on a continual basis and (v) provide written notice of the resumption of its performance of its obligations hereunder. Notwithstanding any of the foregoing, the settlement of any strike, lockout or labor dispute constituting an Uncontrollable Force shall be within the sole discretion of the entity involved in such strike, lockout or labor dispute and the requirement that an entity must use its best efforts to mitigate the effects of the Uncontrollable Force and/or remedy its inability to perform and resume full performance of its obligations hereunder shall not apply to strikes, lockouts, or labor disputes.

**16. ISO TECHNICAL ADVISORY COMMITTEE; CHANGES TO ISO PROTOCOLS.****16.1 ISO Technical Advisory Committee.**

The ISO Technical Advisory Committee shall coordinate activities relating to the ISO Controlled Grid and shall consider suggestions for changes to the ISO Protocols in accordance with the procedures set out in Article IV, Section 4 of the ISO's bylaws.

**16.2 ISO Protocol Amendment Process.**

The ISO Governing Board shall establish an ISO Protocol amendment process in order to ensure that all affected parties have an opportunity to participate.

**16.3 Market Surveillance: Changes to Operating Rules and Protocols.**

The ISO shall keep the operation of the markets that it administers under review to determine whether changes in its operating rules or ISO Protocols would improve the efficiency of those markets or prevent the exercise of market power by any Market Participant; and it shall institute necessary changes in accordance with this Section 16. The details of the ISO Market Monitoring and Information Protocol are set forth in Appendix L, "ISO Protocols".

**17. ASSIGNMENT.**

Obligations and liabilities under this ISO Tariff and any SC Agreement or other agreements giving contractual effect to this ISO Tariff shall be binding on the successors and assigns of the parties to such agreements. No assignment of any SC Agreement or other agreements giving contractual effect to this ISO Tariff shall relieve the original party from its obligations or liabilities to the ISO under this ISO Tariff or any such agreement arising or accruing due prior to the date of assignment.

**18. TERM AND TERMINATION.**

**18.1** This ISO Tariff, shall become effective on the date it is permitted to become effective by the FERC.

**18.2** This ISO Tariff shall terminate upon approval of termination by the ISO Governing Board in accordance with the bylaws of the ISO and receipt of any necessary regulatory approval from FERC.

**19. REGULATORY FILINGS.**

Any amendment or other modification of any provision of this ISO Tariff must be in writing and approved by the ISO Governing Board in accordance with the bylaws of the ISO. Any such amendment or modification shall be effective upon the date it is permitted to become effective by FERC. Nothing contained herein shall be construed as affecting, in any way, the right of the ISO to furnish its services in accordance with this ISO Tariff, or any tariff, rate schedule or SC Agreement which results from or incorporates this ISO Tariff, unilaterally to make an application to FERC for a change in rates, terms, conditions, charges, classifications of service, SC Agreement, rule or regulation under FPA Section 205 and pursuant to the FERC's rules and regulations promulgated thereunder. Nothing contained in this ISO Tariff or any SC Agreement shall be construed as affecting the ability of any Market Participant receiving service under this ISO Tariff to exercise its rights under Section 206 of the FPA and FERC's rules and regulations thereunder.

**20. MISCELLANEOUS.****20.1 Notice.****20.1.1 Effectiveness.**

Any notice, demand, or request in accordance with this ISO Tariff, unless otherwise provided in this ISO Tariff or in any ISO Protocol, shall be in writing and shall be deemed properly served, given, or made: (a) upon delivery if delivered in person, (b) five (5) days after deposit in the mail if sent by first class United States mail, postage prepaid, (c) upon receipt of confirmation by return facsimile if sent by facsimile, or (d) upon delivery if delivered by prepaid commercial courier service.

**20.1.2 Addresses.**

Notices to the ISO shall be sent to such address as shall be notified by the ISO to Market Participants from time to time. Notices issued by the ISO to any Scheduling Coordinator shall be delivered to the address of the Scheduling Coordinator included in the SC Application Form. Notices to any Market Participant other than a Scheduling Coordinator shall be delivered by the ISO to the address given to it by the Market Participant. The ISO and any Market Participant may at any time change their address for notice by notifying the other party in writing.

**20.1.3 Notice of Changes in Operating Rules and Protocols.**

The ISO shall give all Market Participants notice of at least thirty (30) days of any changes or proposed changes in its operating rules, procedures and protocols, unless: (1) a different notice period is specified by state or Federal law or (2) the change is reasonably required to address an emergency affecting the ISO Controlled Grid or its operations, in which case the ISO shall give Market Participants as much notice as is reasonably practicable. Any notices issued under this provision shall be delivered in accordance with the procedures set out in Section 20.1 of this ISO Tariff.

**20.2 Waiver.**

Any waiver at any time by the ISO or any Market Participant of its rights with respect to any default under this ISO Tariff, or with respect to any other matter arising in connection with this ISO Tariff, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this ISO Tariff. Any delay short of the statutory period of limitations in asserting or enforcing any right shall not constitute or be deemed a waiver.

**20.3 Confidentiality.****20.3.1 ISO**

The ISO shall maintain the confidentiality of all of the documents, data and information provided to it by any Market Participant that are treated as confidential or commercially sensitive under Section 20.3.2; provided, however, that the ISO need not keep confidential: (1) information that is explicitly subject to data exchange through WEnet pursuant to Section 6 of this ISO Tariff; (2) information that the ISO or the Market Participant providing the information is required to disclose pursuant to this ISO Tariff, or applicable regulatory requirements (provided that the ISO shall comply with any applicable limits on such disclosure); or (3) information that becomes available to the public on a non-confidential basis (other than as a result of the ISO's breach of this ISO Tariff).

**20.3.2 Confidential Information**

The following information provided to the ISO by Scheduling Coordinators shall be treated by the ISO as confidential:

- (a) individual bids for Supplemental Energy;
- (b) individual Adjustment Bids for Congestion Management which are not designated by the Scheduling Coordinator as available;
- (c) individual bids for Ancillary Services;
- (d) transactions between Scheduling Coordinators;

- (e) individual Generator Outage programs unless a Generator makes a change to its Generator Outage program which causes Congestion in the short-term (i.e. one month or less), in which case, the ISO may publish the identity of that Generator.

### **20.3.3 Other Parties**

No Market Participant shall have the right hereunder to receive from the ISO or to review any documents, data or other information of another Market Participant to the extent such documents, data or information is to be treated as in accordance with Section 20.3.2; provided, however, a Market Participant may receive and review any composite documents, data, and other information that may be developed based upon such confidential documents, data, or information, if the composite document does not disclose such confidential data or information relating to an individual Market Participant and provided, however, that the ISO may disclose information as provided for in its bylaws.

### **20.3.4 Disclosure**

Notwithstanding anything in this Section 20.3 to the contrary, if the ISO is required by applicable laws or regulations, or in the course of administrative or judicial proceedings, to disclose information that is otherwise required to be maintained in confidence pursuant to this Section 20.3, the ISO may disclose such information; provided, however, that as soon as the ISO learns of the disclosure requirement and prior to making such disclosure, the ISO shall notify any affected

Market Participant of the requirement and the terms thereof. The Market Participant may, at its sole discretion and own cost, direct any challenge to or defense against the disclosure requirement and the ISO shall cooperate with such affected Market Participant to the maximum extent practicable to minimize the disclosure of the information consistent with applicable law. The ISO shall cooperate with the affected Market Participant to obtain proprietary or confidential treatment of confidential information by the person to whom such information is disclosed prior to any such disclosure.

#### **20.4 Staffing and Training To Meet Obligations.**

The ISO shall engage sufficient staff to perform its obligations under this ISO Tariff in a satisfactory manner consistent with Good Utility Practice. The ISO shall make its own arrangements for the engagement of all staff and labor necessary to perform its obligations hereunder and for their payment. The ISO shall employ (or cause to be employed) only persons who are appropriately qualified, skilled and experienced in their respective trades or occupations. ISO employees and contractors shall abide by the ISO Code of Conduct for employees contained in the ISO bylaws and approved by FERC.

#### **20.5 Accounts and Reports.**

The ISO shall notify Market Participants of any significant change in the accounting treatment or methodology of any costs or any change in the

accounting procedures, which is expected to result in a significant cost increase to any Market Participant. Such notice shall be given at the earliest possible time, but no later than, sixty (60) days before implementation of such change.

#### **20.6 Titles.**

The captions and headings in this ISO Tariff are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the rates, terms, and conditions of this ISO Tariff.

#### **20.7 Applicable Law and Forum.**

This ISO Tariff shall be governed by and construed in accordance with the laws of the State of California, except its conflict of laws provisions. Market Participants irrevocably consent that any legal action or proceeding arising under or relating to this ISO Tariff to which the ISO ADR Procedures do not apply, shall be brought in any court of the State of California or any federal court of the United States of America located in the State of California. Market Participants irrevocably waive any objection that they may have now or in the future to said courts in the State of California as the proper and exclusive forum for any legal action or proceeding arising under or related to this ISO Tariff.

#### **20.8 Consistency with Federal Laws and Regulations**

- (a) Nothing in the Tariff shall compel any person or federal entity to: (1) violate federal statutes or regulations; or (2) in the case of a federal agency, to

exceed its statutory authority, as defined by any applicable federal statutes, regulations, or orders lawfully promulgated thereunder. If any provision of this Tariff is inconsistent with any obligation imposed on any person or federal entity by federal law or regulation to that extent, it shall be inapplicable to that person or federal entity. No person or federal entity shall incur any liability by failing to comply with a Tariff provision that is inapplicable to it by reason of being inconsistent with any federal statutes, regulations, or orders lawfully promulgated thereunder; provided, however, that such person or federal entity shall use its best efforts to comply with the Tariff to the extent that applicable federal laws, regulations, and orders lawfully promulgated thereunder permit it to do so.

- (b) If any provision of this Tariff requiring any person or federal entity to give an indemnity or impose a sanction on any person is unenforceable against a federal entity, the ISO shall submit to the Secretary of Energy or other appropriate Departmental Secretary a report of any circumstances that would, but for this provision, have rendered a federal entity liable to indemnify any person or incur a sanction and may request the Secretary of Energy or other appropriate Departmental Secretary to take such steps as are necessary to give effect to any provisions of this Tariff that are not enforceable against the federal entity.

- (c) To the extent that the ISO suffers any loss as a result of being unable to enforce any indemnity as a result of such enforcement being in violation of federal laws or regulations to which it is entitled under the Tariff under this Section or otherwise, it shall be entitled to recover such loss through the Grid Management Charge.

**21. GENERATION METER MULTIPLIERS.****21.1 Temporary Simplification Relating to GMM Loss Factors.**

Notwithstanding any other provision in the ISO Tariff, including the ISO Protocols, in determining whether a Schedule is a Balanced Schedule, no allowance shall be made for Transmission Losses (i.e. the Generation Meter Multiplier shall be set at 1.0) for the PX and all other Scheduling Coordinators.

**21.2 Application.**

Notwithstanding any other provision in this Tariff, including the ISO Protocols, the temporary simplification measure specified in this Section 21 shall have effect until discontinued by a Notice of Full-Scale Operations issued by the Chief Executive Officer of the ISO.

**21.2.1** Pursuant to Subsections 21.3.1 and 21.3.2, the Chief Executive Officer of the ISO shall give notice to all Scheduling Coordinators, except the PX, that such Scheduling Coordinators shall use forecasted Generation Meter Multipliers, as published by the ISO, in their Schedules. Such notice shall be given only after the Chief Executive Officer determines that the ISO is capable of accepting schedules using the forecasted Generation Meter Multipliers without adversely affecting operations or reliability.

**21.2.2** Pursuant to Subsections 21.3.1 and 21.3.2, the Chief Executive Officer of the ISO shall give notice to the PX that the PX shall use forecasted Generation

Meter Multipliers, as published by the ISO, in its Schedules, upon mutual agreement by the Chief Executive Officers of the ISO and PX that the PX is capable of providing schedules pursuant to this Tariff using the ISO's forecasted Generation Meter Multipliers without adversely affecting operations or reliability.

### **21.3 Notices of Full-Scale Operations.**

**21.3.1** When the Chief Executive Officer of the ISO determines that the ISO is capable of implementing this Tariff, including the ISO Protocols, without modification in accordance with a temporary simplification measure specified in this Section 21, he shall issue a notice ("Notice of Full-Scale Operations") and shall specify the relevant temporary simplification measure and the date on which it will permanently cease to apply, which date shall be not less than seven (7) days after the Notice of Full-Scale Operations is issued.

**21.3.2** A Notice of Full-Scale Operations shall be issued when it is posted on the ISO Internet "Home Page," at <http://www.caiso.com> or such other internet address as the ISO may publish from time to time.

**22. SCHEDULE VALIDATION TOLERANCES.****22.1 Temporary Simplification of Schedule Validation Tolerances.**

Notwithstanding any other provision in the ISO Tariff, including the ISO Protocols, a Schedule shall be treated as a Balanced Schedule when aggregate Generation, adjusted for Transmission Losses, is within 20 MW of aggregate Demand, or such lower amount, greater than 1 MW, as may be established from time to time by the ISO. The ISO may establish the Schedule validation tolerance level at any time, between a range from 1 MW to 20 MW, by giving seven days' notice published on the ISO's "Home Page," at <http://www.caiso.com> or such other internet address as the ISO may publish from time to time.

**22.2 Application.**

Notwithstanding any other provision in this Tariff, including the ISO Protocols, the temporary simplification measure specified in this Section 22 shall have effect until discontinued by a Notice of Full-Scale Operations issued by the Chief Executive Officer of the ISO.

**22.3 Notices of Full-Scale Operations.**

**22.3.1** When the Chief Executive Officer of the ISO determines that the ISO is capable of implementing this Tariff, including the ISO Protocols, without modification in accordance with a temporary simplification measure specified in this Section 22, he shall issue a notice ("Notice of Full-Scale Operations") and

shall specify the relevant temporary simplification measure and the date on which it will permanently cease to apply, which date shall be not less than seven (7) days after the Notice of Full-Scale Operations is issued.

**22.3.2** A Notice of Full-Scale Operations shall be issued when it is posted on the ISO Internet "Home Page," at <http://www.aiso.com> or such other internet address as the ISO may publish from time to time.